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Clinical Section

Common Mistakes in Cardio-Vascular Diagnosis

By

J. D. ADAMSON, B.A., M.D. (Man.), M.R.C.P. (Edin.), F.R.C.P. (C.)

Associate Professor of Medicine and Director of Medical Service, St. Boniface Hospital

When any one of us undertakes to point out mistakes to the rest of us, it is hard to escape the implication of superiority on the part of the one who is doing the preaching. I wish to disown any claim to such pre-eminence. In fact I feel that the committee that arranged the programme had quite a different idea. They said: "Who has made most mistakes in diagnosis? Whoever he is should know most about them." Naturally I was selected.

First of all let us consider the question from a general point of view without special reference to specific cases. What then can we say is the wrong tendency most often found in cardio-vascular diagnosis? I feel that it is still a disposition to over-diagnosis of organic heart disease. I say "still" because there is no doubt that this tendency has improved since McKenzie's time. In the Victorian age the number of people who were wrongly consigned to chronic cardiac invalidism was appalling. In that day murmurs of any sort, irregularities of any sort, palpitation, prae-cordial distress, faintness, and a multitude of other signs and symptoms, were almost universally interpreted as indicating heart disease. In the past thirty years this tendency has been corrected to a very large extent. But, it still exists. There are several reasons for its perpetuation.

1. The general tendency of modern diagnosis is overwhelmingly towards the physical side. Our system of medical education allots at least ninety-five percent of the student's time to matters that are entirely material. We aspire to explain all symptoms in terms of pathology, biochemistry and bacteriology. Consequently we over-step reason in our search for physical explanations of subjective feelings. In our enthusiasm we too often forget that symptomology and pathology cannot be made to correspond except in a very small minority of cases. Pathological changes do produce subjective symptoms; but these symptoms are altered in an infinite number of ways by personality. Symptoms, if you like, are a reflection of pathological changes; but they are a reflection from a mirror which is the individuality of the patient. This mirror is not the same in any two people; each has a thousand facets, distortions and flaws.

2. Heart disease, particularly is liable to be over-diagnosed. There are two broad reasons for this. The first is psychological and due to the fact that men know instinctively that the heart is essential to life and that its serious defection means death. Indications of this primitive belief can be found in our literature in all ages and it may also be discovered among aboriginal people of the present day. This fear of heart disease infects the laity and profession alike. The consequence is that as a systemic disease it comes to occupy far too prominent a place in the minds of both patients and doctors.

3. The second reason for the over-diagnosis of heart disease in particular is physiological. It is due to the fact that the physical effects of strong emotion are almost entirely cardio-vascular. They induce increased blood pressure and accelerate the pulse. These in turn give rise to various sorts of prae-cordial or epigastric distress, palpitation, and a feeling of breathlessness. These sensations are on the part of the patient almost always attributed to heart disease. This suspicion augments their emotion and increases their symptoms. Too often the vicious circle is confirmed and perpetuated by a medical opinion which is also influenced by doubts and fears.

4. The fourth reason for over-diagnosis at this particular time is the general belief on the part of the profession and the laity that heart disease is increasing. Realization of the menace of heart disease has produced in many middle-aged people what is called by the Americans "heart consciousness". Whenever an apparently robust person suddenly expires from heart disease, his immediate friends and relatives begin at once to suspect that they themselves may not be far distant from a similar fate. This drives hundreds of people to doctors with a great variety of subjective symptoms attributed to the heart.

Symptoms Leading to Over-Diagnosis

Let us consider some of the subjective feelings that are commonly thought to be associated with heart disease. The commonest among these are: Pain in the left lower chest, palpitation, dizziness, faintness, various sorts of respiratory distress, fatigue, tired feeling, loss of energy, etc. Most often these symptoms are not due to organic heart disease. How, then, must we go about determining when they are of significance or when they are best ignored? A simple history and a physical examination will give us the right lead in most cases.

Præcordial Pain

The præcordium, the left mammary or left pectoral region is a very common site for pain. We all see many instances of it each year. Patients almost invariably attribute it to the heart. For them it is cardiac until proved otherwise. Actu-

ally it is very rarely due to heart disease, and should be regarded as not cardiac until proved otherwise. It need only be taken seriously when anginal. By a careful analysis of the various characteristics of the pain we can practically always decide for or against angina.

1. *Nature of Pain.* Much præcordial pain is stabbing or lancinating. We can in that case be perfectly confident that it is not due to heart disease. True anginal pain is invariably steady and grinding or squeezing; it varies little in intensity from second to second. Also, anginal pain is usually severe, and comes in definitely circumscribed attacks with perfectly clear intervals. Præcordial pain of other origin is more irregular in its occurrence, and more variable in its intensity; the patient is liable to complain of aching or discomfort over a period of hours.

2. *Site and Radiation.* True anginal pain almost always is inside of the nipple line. Usually it is retrosternal or epigastric. We can say that the further the pain is to the left and downwards, the less likely it is to be originating from the heart.

Radiation of the pain into the arms and neck usually marks it as anginal. However, a pleural pain will occasionally radiate down the arm, and pains due to fibrositis sometimes simulate angina by involving both the left chest wall and the left arm.

3. *Effect on the Patient.* True anginal pain usually stops the patient in his tracks no matter what he is doing, and he is commonly filled with apprehension. Non-anginal pain is not accompanied by this fear, and usually does not interfere to a very great extent with activity.

4. *Relation to Effort and Meals.* A close and invariable relationship between the pain and activity marks it as anginal. When we speak of activity we include digestive activity. Anginal pains are very common after heavy meals, especially if there is also added some physical effort.

When a pain in the chest or upper abdomen does not conform to the usual description of angina, how can we determine its nature?

5. *Tests for Non-Cardiac Praecordial Pain.* One of the commonest causes of pain in the præcordium is fibrositis or myositis, or if you like, neuritis in the chest wall. This is very often characterrized by the fact that it is increased with use of the left arm. By putting the various muscles attached to the chest wall into action against resistance such a pain is usually increased. Pressing the palms of the hands together with arms extending often discloses the origin of chest pains. Anther common cause of this pain is spasticity or spasm of the splenic flexure, or of the stomach. This pain is usually below and to the left of the nipple or lower; is associated with the other symptoms of spastic constipation, or gastric hypertonicity, and is relieved by proper regulation of the bowels.

6. *Other Indications of Angina.* There are certain associated conditions which when present help to confirm the presence of angina. These are:—

a. Gross evidence of arterio sclerosis.
b. Definite cardiac hypertrophy.
c. Increased blood pressure.
d. Obvious dyspnœa.

Palpitation

Palpitation is also a very common symptom, and naturally it invariably causes people to think of their heart. As a matter of fact, it is rarely a troublesome symptom in organic heart disease, but very commonly associated with the neuroses.

In the production of palpitatin there are two factors. One is purely physical and is due to increased pulse pressure. The other is purely nervous and is due to hypersensitiveness. Any circumstance which raises pulse pressure very much will likely produce palpitation even though the patient is not abnormally sensitive. The common conditions that do this are:

1. Undue excitability.
2. Aortic regurgitation.
3. Profound anæmia.
4. Hyperthyroidism.
5. Arterio sclerosis.
6. Some cardiac arhythmias, e.g., Extrasystoles.

In the presence of palpitation, each of these conditions must be thought of. None of them are difficult to spot.

The palpitation due to extra-systoles is characteristic and common. The patient as a rule complains that soon after lying down at night he is awakened by an irregular thumping in his chest, a choking feeling in the throat, and slight breathlessness. This alarms him and he immediately sits up or gets out of bed. The symptoms then disappear, but are liable to recur on lying down again. These sensations are also liable to arise any time during the day when the patient is inactive. Very commonly they cause great alarm, and the patient becomes convinced that he has grave heart disease. Sometimes these attacks are mistaken for cardiac asthma. In the absence of other evidence of heart disease they are, of course, of no significance, and patients usually recover from the annoyance caused by them, by re-assurance and possibly abstinence from tea, coffee and tobacco for a time. It is occasionally necessary to give a sedative.

In most cases complaining of palpitation, however, no evidence of any of the conditions mentioned will be discovered. Most often palpitation is simply due to the nervous element, hypersensitiveness. This is particularly common in adolescence, and at the climacteric. At these times there is much vasomotor instability, and also increased sensitiveness; also there is apprehension so that most women at that time of their lives are liable to believe that their hearts are diseased.

Certainly the percentage of cases with palpitation which turn out to have organic heart disease, are few. If palpitation is a chief symptom, one's mind should turn away rather than towards the idea of heart disease.

Dyspnœa

Dyspnœa is the cardinal and most important symptom of beginning heart failure. In its presence one should make a meticulous study before declaring the cardio-vascular system to be sound. On that account one hesitates to discount it too much as a symptom. However, dyspnœa is relative. In the ordinary course of events we all become relatively short of breath. Many people past middle age become unduly alarmed because they can no longer sprint for a street car or crank their motor cars without distress. In many of these cases, especially if a patient is overweight, I think we are justified in reassuring him, if a history and thorough examination discloses no other convincing signs.

There is one type of dyspnœa which always carries a very grave significance, and that is paroxysmal nocturnal attacks, or what is called "cardiac asthma". It is usually associated with other obvious evidences of cardio-vascular degeneration which will differentiate it from ordinary bronchial asthma.

There is another fairly common complaint which people often describe as shortness of breath. It is what may be called the "sighing habit". It consists of repeated and futile efforts to accomplish a full and satisfactory breath. After each attempt the patient feels that the lungs have not been completely expanded, and he then makes repeated efforts to get a full breath. This commonly goes on until he becomes dizzy from hyper-ventilation. This episode may occur very frequently during the day, and the patient becomes obsessed by the habit and is filled with fear as to its significance. It is in fact merely a habit associated with various anxiety states. Usually it is readily cured by explaining to the patient that his heart and lungs are normal, and that he is suffering from a nervous habit.

Fatigue

This is probably one of the commonest complaints that we hear. How often do patients say, "I wake up in the morning feeling all in: A night's sleep does not seem to rest me: I am dead tired in the middle of the afternoon"—and so on. If we review the prodromal or early symptoms attributed to any organic disease including cardio-vascular disease, we will find this symptom listed with the rest. No doubt it does occur in a great many diseases. However, it occurs times without number in people who have no demonstrable disease, and conversely most organic diseases can progress to an advanced stage in the absence of this particular sensation. It seems certain that this sensation of exhaustion and fatigue has little to do with actual physiological fatigue. The shop girl who comes home exhausted in the evening is re-invigorated when her boy friend asks her to a dance; and she returns from the dance after having expended a great deal of energy, with more apparent strength than she had at the end of the day's work. In the morning, after a good night's sleep she faces a day of drab routine, and cannot shake the feeling of exhaustion. Most of us are the same. We are liable to become slack and atonic in the absence of psychical stimulation. In dull and distressful times when nothing new or interesting is happening, this tendency is increased. On some days practically all the patients that one encounters has this among their complaints. It is admittedly difficult to dispel without reconstructing the lives of all of them. However, the only point I wish to make here is that this common complaint is rarely due to cardio-vascular disease. If no other definite signs are found and we can explain the origin of this symptom to the patient, he will usually be much happier.

Signs Leading to Over-Diagnosis

I have referred to several subjective symptoms that the patient often attributed to cardiac weakness. Now may I deal with two signs by which we have sometimes been over-impressed. I refer to extra-systoles and systolic murmurs.

Extra-Systoles

Sir James McKenzie once said that extra-systoles had the same significance in diagnosis and prognosis as grey hairs. After thirty years there seems to be no good reason for giving up this dictum. This form of irregularity has been intensively investigated in recent years, and it has unquestionably been shown to have a definite association with cardiac disease. However, in itself and without other evidence of heart disease, it is of no importance and should be studiously ignored. Unquestionably, it sometimes causes subjective symptoms which have been dealt with under the subject of palpitation. The chief element in treatment, however, is to reassure patients who are conscious of the irregularity, and to withhold any reference to the extra-systoles when it occurs without producing any sensation.

Systolic Murmurs

One hundred years ago when Laennec was establishing the stethoscopic signs of pulmonary infection, he also made an effort to unravel the meaning of cardiac murmurs. He finally gave up in despair because he found that he could not co-relate what he found with the stethoscope with post mortem findings. Sometimes one feels that if this opinion had been accepted, cardiology would have advanced more rapidly. However, the stethoscopists who followed Laennec insisted that it was reasonable to attach structural disease to every murmur. A system of cardiology was then built up in which each valve of the heart was given a systolic and diastolic murmur, and these murmurs were believed respectively to indicate stenosis and regurgitation. This was the

system of cardiology on which most of us were reared.

Before the War, Sir James McKenzie pointed out that systolic murmurs were commonly innocuous. Experience in the War conclusively proved that this was so. Now we can say that a systolic murmur, unassociated with other evidences of cardiac disease, should be ignored. There are, however, still a certain number of people going through life with an idea of physical inferiority because of the presence of such a murmur.

The advent of a systolic murmur during the course of acute rheumatic fever is commonly alleged to indicate the beginning of rheumatic heart disease. It seems very unlikely that this is a reliable sign. During the course of any acute fever, especially in young people, a systolic murmur frequently arises. Whether or not it is due to a relative insufficiency of one of the valves from slight atony of the heart is an academic question. The fact is that these murmurs are of no real significance in themselves. They have very often been interpreted as organic even when occurring with acute fevers that do not produce any serious cardiac damage.

There is one type of systolic murmur which may give one a clue to diagnosis. When such a murmur is heard in or near the second right interspace in a mature adult (especially a male) one should seriously consider the possibility of syphilitic aortitis. If it is known that the murmur has actually developed during adult life, then the probabilities of syphilis are much increased.

Over Apprehension in the Presence of Organic Heart Disease

What I have said so far have been largely concerned with over-diagnosis of heart conditions. Now may I say a word about over-apprehension in the presence of known cardio-vascular lesions. There are many aspects of this subject but we shall deal with it only in so far as it affects surgery.

Surgeons have always held the heart in the deepest respect. Before venturing upon any major operation they are very concerned to know whether or not "the heart will stand the strain". The best surgeons and hospitals insist on a record of the blood pressure and an account of the heart sounds before operation is undertaken. If the patient dies during the operation or soon after the cause is commonly put down to heart failure.

This attitude to the heart in connection with surgery seems to be full of fallacies. First of all, let us enquire if normal people commonly die from heart failure after operations — no matter how severe the operation may be? Do we see angina, cyanosis, congestive failure or cardiac asthma supervening? We do not. Operations rarely mark the beginning.

Let us go further and enquire whether these evidences of heart failure are commonly seen post operatively even in people who have organic heart disease. Again we must admit that they are rare. Sudden deaths during or after operation usually occur in those whose hearts appear normal.

Patients with hypertension go through operations unusually well; if there is any virtue in reducing blood pressure then an operation might be called a most useful therapeutic measure in these cases. Patients who are subject to angina also do surprisingly well during and after operations. Organic heart lesions in the absence of failure seem to give no added risk. It is true that in the presence of congestive heart failure one could expect some increase of mortality. Even in these cases it is astonishing to see how well they tolerate the prolonged and severe operation of total thyroidectomy.

This undue apprehension for surgery in the presence of known heart disease has worked to the disadvantage of one group of patients in particular. I refer to those people with anginal attacks who also have inflammatory disease in the abdomen—particularly gall bladder disease. The two pathological conditions — coronary disease and gall bladder disease are often associated. This may be purely a coincidence since they are both rather common and have the same age incidence. But, besides the actual coincidence of these two organic conditions, there is a definite relationship between the subjective symptoms produced by them. Gall bladder disease in the absence of real coronary disease probably can produce pain that is almost identical to true angina. No doubt gall bladder disease can also encourage the production of pain in the presence of only mild coronary disease.

In any event, there seems little doubt that adequate treatment of a diseased gall bladder frequently has a very salutory effect on anginal pains. Two years ago I reported two cases in which removal of the gall bladder had alleviated angina, and suggested that any doubtful gall bladders should be removed—not in spite of, but on account of anginal attacks. Since then I have seen several other cases since and am more than ever convinced that diseased gall bladders should be removed in the presence of angina.

It may be that removal of the gall bladder in angina is analogous in a neurological way to removal of the thyroid. We do not know the cause of anginal pain. There can be no doubt that the sympathetic and para-sympathetic nervous systems have much to do with its production. Removal of the thyroid in many cases stops it immediately. This cannot be due to metabolic changes because these do not supervene for some days after operation. Can it be due to a gross distortion of sympathetic impulses by so great a disruption as must take place when the thyroid, rich in sympathetic fibres, is removed? Can the

same hypothesis apply to the gall bladder which also has a generous nerve supply from the vagus and sympathetic?

Whatever the explanation we are justified in advising cholecystectomy in cases with anginal pain and gall bladder disease. Curiously enough it sometimes requires a good deal of persuasion to bring the surgeon round to it, so convinced is he that the slightest cardiac disorder puts a taboo on operation of any sort.

Rheumatic Heart Disease – The Healed Stage

By

JOHN BRODIE, B.Sc., A.K.C., M.R.C.S. (Eng.), L.R.C.P. (Lond.), M.B., B.S. (Lond.)

The healed stage of Rheumatic Heart Disease begins as soon as the patient has completely recovered from Rheumatic Fever, and lasts for many years—ten, fifteen, twenty years or more, until heart failure with dropsy finally develops. During all these years, such a patient continues to consult us very frequently, and most of us find it quite a problem to decide how best to deal with him, or more often with her.

Active Infection.

The first question that has to be settled is important, namely, has the rheumate infection really healed up, that is to say, not merely in the joints, but in the heart as well. For, if we can be sure that the cardiac infection has been got rid of, then the prognosis is relatively very good. The trouble is, however, that in all too many cases, even after the temperature has become normal, the inflammatory process in the heart is not completely extinguished, and continues to smoulder like a volcano beneath the surface. Such cases are still active with rheumatic carditis, and, like the analogous cases with active pulmonary tuberculosis, demand continued rest in bed until the inflammation has been overcome. A truly healed case, on the other hand, need not be kept at rest in bed.

There are several methods we can use for the purpose of determining whether a case still harbours rheumatic infection in the heart. One is to do a leucocyte count. If the blood no longer shows any leucocytosis, then the patient is to be considered free from any cardiac infection. This, however, is not always true, for cases can be shown, with a normal leucocyte count, who still have active infection in the heart. For this reason, the sedimentation rate has recently been used, as in pulmonary tuberculosis, for the more accurate determination of activity in rheumatic cases. This test, however, has not been fully tried out, and only further experience will establish its worth.

There remains, however, the clinical test, which is not only simple but fairly accurate. All we have to do is to count the pulse. So long as the rate of the pulse is above normal, we may conclude that the heart has not completely recovered from the infection, and the patient should continue to rest in bed. If the rate has come down to normal, the patient may gradually be allowed up. In children or in nervous patients, it is enough if the sleeping pulse rate is normal.

Valvular Disease.

Having satisfactorily excluded active infection and piloted our rheumatic patient safely into the healed stage, another important question remains to be answered. Has the patient valvular disease or not? Now, the only pathognomonic sign is a diastolic murmur, although it may not be heard until many months after the attack of rheumatic fever. In the meantime, all that can be heard is a systolic murmur at the apex, which does not necessarily indicate valvular disease. For a systolic murmur very often results from mere stretching of the mitral ring due to fever, anæmia or hypertension. Or an apical systolic murmur may be purely functional, especially in young people with overactive hearts. Thus the cardiorespiratory murmur, which is the commonest type, is due to the rush of air into the chest each time an overactive heart contracts, so that what we hear is not a cardiac but a respiratory murmur. A systolic murmur by itself is, therefore, not positive evidence of valvular disease, and it is a bad mistake to diagnose mitral disease when all that can be found is a soft systolic murmur.

An exception may be made only when the systolic murmur is harsh, long and constant, for then it does often indicate valvular disease, especially if there is a typical history of rheumatic fever. Since, however, only a rumbling diastolic murmur is sure and positive evidence of mitral stenosis, it is better to give a little exercise and listen immediately afterwards with the patient in the recumbent or even the left lateral position. The pathognomonic tell-tale murmur will then be heard, and the diagnosis established.

If, however, there is still doubt about it, the best way to confirm it is by taking an x-ray film of the heart. If mitral stenosis is present, it will be noticed that the left auricle is prominent in the left upper quadrant, and the right is prominent in the right lower quadrant of the heart. It was found statistically, a few years ago, at the National Heart Hospital in London, that over 75 percent of cases with proven mitral stenosis show this characteristic mitral configuration of the heart. An electrocardiogram, on the other hand, is disappointing, for it does not help us to diagnose an early or doubtful case of mitral stenosis.

Many years later, the patient may develop auricular fibrillation. When that happens, any rumbling presystolic murmur originally present will disappear, because the left auricle is no longer able to propel the blood actively into the left ventricle. But now we no longer need the mur-

mur for diagnosis. For auricular fibrillation in young people, i.e., below the age of forty, is commonly due to one of two causes, either mitral stenosis or exophthalmic goitre. If the patient is not suffering from hyperthyroidism, which can easily be excluded, then it is fair to conclude that the fibrillation is due to mitral stenosis. Besides, if the rate of the heart is slowed by digitalis, a mid-diastolic rumble will often be heard in such cases.

Thus, it is not a very difficult matter to make a sure and confident diagnosis of mitral stenosis at the different stages of its development. To diagnose it on the sole evidence of a soft systolic murmur at the apex is really indefensible. Nor is it good practice to tell a patient or his relatives that there is a leaky valve, unless a rumbling diastolic murmur is heard. If we are not sure about the diastolic murmur, even after exercise and in the recumbent position, then a history of migrating polyarthritis will make the diagnosis of mitral stenosis likely, and an x-ray will very often confirm it.

Aortic regurgitation of rheumatic etiology does occasionally occur alone, but usually there is mitral stenosis also. This is not so in aortic regurgitation of luetic etiology. The only early pathognomonic sign is again a diastolic murmur, not rumbling as in mitral disease, but soft and blowing in character. We used to think that this murmur was heard only, or best, in the classical aortic area on the right, but now we know that it is often heard best on the left side close to the sternum, and even as far down as the fourth space. Other signs, like the water-hammer pulse, the lowered diastolic pressure and the increased pulse-pressure, appear much later when the condition has advanced. We cannot, therefore, afford to wait for a diagnosis until these vascular signs have developed, for it has been estimated that we should thus miss the diagnosis in no less than fifty percent of our cases. Early cases of aortic regurgitation must be diagnosed on the strength of the murmur alone.

It is easy to time this aortic diastolic murmur if there are two murmurs at or near the base of the heart, the so-called "to and fro murmur," because one of these is diastolic. If, however, only one murmur is heard, then it can be timed quite conveniently by watching the pulsation of the apex, for we know that the out-thrust is systolic and the recession is diastolic in time. The difficulty about this important murmur is its softness, which explains why it is so often missed in the early stages of the disease. Fortunately, it is possible to increase its loudness by listening at the end of a forced expiration with the patient in the sitting position.

Mitral stenosis and aortic regurgitation are the two important valvular lesions of rheumatic heart disease. For practical purposes it is best not to bother about any others. Since the War, the best cardiologists have refrained from diagnosing mitral regurgitation. If we are sure there is an organic lesion of the mitral valve, we can call it either mitral disease or simply mitral stenosis. As for aortic stenosis, it has been found that it really occurs about twenty times less often than mitral stenosis, so that we may safely follow Sir Thomas Lewis's advice to diagnose an infrequent lesion infrequently. It is well to remember that, just as a systolic murmur at the apex does not always mean mitral stenosis, so a systolic murmur in the aortic area does not often mean aortic stenosis. Let us be content with a well-founded diagnosis of either mitral stenosis or aortic regurgitation. That is good enough for ordinary practice. Unless we are certain that one of these lesions is present, let us not diagnose valvular disease, or tell the patient about a leaky valve. Otherwise, we encourage the development of an unjustifiable and obstinate anxiety neurosis.

Treatment.

The chief aim in the treatment of rheumatic heart disease during the prolonged intermediate healed stage can be stated very briefly. It is to prevent or postpone the development of congestive heart failure. It is well to ask ourselves what is the main cause of heart failure. We used to think that it was due to the strain suffered by the heart in working against the handicap of the valvular lesion. As we were powerless to remove this handicap, all we could offer our patients was the advice to work a little, rest a lot, and generally take it easy. Now, however, we know that there is a much more potent cause of heart failure, and that is infection. It is infection which robs the heart muscle of much of its reserve, and saps its strength to such an extent that it loses the power to drive the blood onwards with sufficient energy. And this infection need not be accompanied by the typical polyarthritis of rheumatic fever. Any upper respiratory infection, whether it be the ordinary cold, or the Grippe, or acute bronchial catarrh may, and often does, weaken the heart considerably, particularly if the patient takes little notice of it and remains up and about as usual.

Again and again I have been impressed by the number of patients struck down by congestive failure who, only a short time previously, showed no signs of impending failure. They often give a history of having recently caught a severe chill, or been attacked by the Grippe, which they have been unable to shake off. I have also had the opportunity of examining patients periodically with a well compensated mitral stenosis, who, on catching an ordinary cold or the 'flu, developed auricular fibrillation or signs of congestive heart failure. An upper respiratory infection will often act as the precipitating cause of auricular fibrillation, or serve to decompensate a previously compensated heart. With this in mind, I have come to look upon an upper respiratory infection in a rheumatic patient as a potential attack of rheumatic fever, and treated it as such.

In order, therefore, to prevent the onset of such premature failure, I believe we should give our rheumatic patients some practical advice which will help them to avoid contracting an upper respiratory infection, or at least to minimize its harmful effects on the heart. I know only too well how meagre is our knowledge and how imperfect our methods for preventing such infections, yet a few practical hints may be given.

Not only should septic tonsils, postnasal infection and infected sinuses be dealt with, but such patients might also be taught that a cold is caught not only in a draughty place but more often from another person already infected. They could, therefore, be instructed how to avoid contact with anybody who is suffering from a cold. If, however, they find that they are already developing a chill, they must be warned against trying to work it off. They should go to bed immediately, just as if they were having another attack of rheumatic fever, and not get out of bed until the doctor has seen them. The physician will judge by the rate of the pulse whether re-infection of the heart has occurred, and will keep them in bed until the rate has become normal. During their stay in bed, these patients may take salicylates or, more conveniently, an aspirin tablet three times a day. If reinfection of the heart is thus prevented or minimized, much has been done to put off the evil day of heart failure. Such preventive care may also save the patient from the fatal complication of subacute bacterial endocarditis.

Although a patient with rheumatic heart disease in the healed stage may be permitted to follow any suitable occupation, it is important to avoid overstrain. Any occupation which necessitates much heavy lifting, or continual hustling and running about, or frequent exposure will be found unsuitable. A sedentary occupation, in an office for example, provided it can be obtained in these days of unemployment, will be the best choice.

Patients with mitral stenosis or aortic regurgitation have signs but should present few symptoms. Complaints, however, are only too common, and are due to one or other of the following three complications. Most complaints are due, not to the organic lesion, but to the patient's ideas about his disease and the emotions aroused by them. The heart has been so dramatized in poem and song and story, that a patient's conception of heart disease becomes charged with a high degree of emotion. Thus it happens with many a patient that, as soon as he discovers that his heart murmurs or leaks, he becomes anxious about himself and goes about in fear of sudden death. An anxiety neurosis is thus developed, which, once established, is very difficult to remove. He goes from doctor to doctor, and whether we pooh-pooh his fears or remain reticent about them, they prey on his mind and interfere with his sleep and work and play. If he had only a few complaints before, he develops them in abundance now. He will even read up the chapter on heart disease in a handy medical textbook, and pick up some more symptoms. Personally, I find that such a patient must be approached from the psychological standpoint, with the object of allaying his fears and proving to his complete satisfaction how good and strong his heart still is. One of the most effective methods is to show him an x-ray film of his heart side by side with other films picturing larger and worse hearts than his.

Then there are patients whose main complaints arise from the fact that they are vividly conscious of the beating of their heart. This may be due either to forcible or rapid but regular pulsation, or to irregular action of the heart. The irregularity is most often found to be due to nothing more than an occasional extrasystole felt especially on going off to sleep, or more rarely to an attack of paroxysmal tachycardia with its sudden onset and offset, or in advanced cases to the more serious arhythmia of auricular fibrillation. To the patient, all these disturbances mean one thing,—palpitation of the heart. These arrhythmias can easily be distinguished by clinical means, such as auscultation and exercise, but it must be emphasized that only auricular fibrillation should be treated with digitalis. The others call for a different approach and need investigation as to precipitating cause.

Lastly, there are symptoms like breathlessness or slight oedema which are the early manifestations of congestive heart failure. This important subject falls outside the scope of the present lecture, but one thing may be said now. Congestive heart failure of rheumatic etiology responds to treatment better than when due to any other cause. Moreover, compensation can often be re-established, even up to as many as five or six times. This is not the case in failure due to hypertension, lues, or coronary disease.

In conclusion, a few words may be said, first, about surgical operations and then about pregnancy and labour in patients with rheumatic heart disease. The danger of operating on cases of valvular disease was much exaggerated in the past. In the healed stage, such a case is a fair operative risk, provided there are no signs of congestive failure. In the absence of any signs like rales in the pulmonary bases, the extra load on the heart incidental to surgical interference is not considerable, particularly if the anæsthetist is both careful and skilful. A question that is often asked is which anæsthetic should be chosen for such a patient. The answer might be put in this form, that it is more important to choose the anæsthetist than the anæsthetic. For, an anæsthetist who is able to avoid struggling, gagging and choking is a good assurance of safety to a cardiac patient undergoing an operation. It is important also, to do all that is possible to avoid any post-operative infection, for such patients do not stand infection well. With such precautions, the operative risk will not be much greater than in non-cardiac cases.

As regards the woman with healed rheumatic heart disease who becomes pregnant, the danger is also not as great as we used to think. If the heart is not grossly enlarged, i.e., if the apex is not more than 1 to 1½ inches outside the midclavicular line, if there is no fibrillation, and particularly if the exercise tolerance is good, no serious harm will develop. It is important, however, to exclude any active rheumatic infection of the heart by means of the tests outlined, and asepsis must be strictly adhered to, because these women stand post-partum infection very poorly indeed.

It is right to admit that the prognosis in the pregnant cardiac patient always remains a little uncertain, since it is not possible to tell how much strain will be thrown on the heart during labour. Of course, labour in these cases should be made as short and as easy as possible, but, in doubtful cases, Cæsarean section is often resorted to, especially if some congestive failure is present. Thus, thanks to the careful technique which characterizes the best modern obstetric practice, the pregnant woman with rheumatic heart disease stands quite a good chance of giving birth to her child with safety, certainly a much better chance than formerly.

Notice re. Atlantic City Meeting

We are desirous of receiving information as to the number of representatives of the Manitoba Medical Association who will be attending the forthcoming annual meeting of the Canadian Medical Association at Atlantic City, N.J., June 10th to 14th. If you intend to be present at the meeting, we would appreciate your notifying the office of the Association, 102 Medical Arts Building, at your earliest convenience.

Editorial and Special Articles

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Editor
C. W. MACCHARLES, M.D. (MAN.)
Advisory Editor
ROSS B. MITCHELL, B.A., M.D., C.M. (MAN.), F.R.C.P.(C.)
Business Manager
J. GORDON WHITLEY
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Editorial

Constitution of the Canadian Medical Association

In the February number of this *Review* was published a report from the Secretary of the Canadian Medical Association, in which it was stated that the Provincial Medical Associations had been consulted about the advisability of changing their respective names to that of the Provincial Branch of the Canadian Medical Association. It will be noted in the minutes of the last meeting of the Executive of the Manitoba Medical Association that the question of the Constitution of the Canadian Medical Association was again discussed. In making his report to the Executive of the Manitoba Medical Association, Dr. W. Harvey Smith referred to a memorandum from the Executive of the Manitoba Medical Association which was sent to the Executive of the Canadian Medical Association at their request in October, 1934. This memorandum suggested some fairly far-reaching changes in the Constitution of the Canadian Medical Association, but it is not clear as yet whether or not these proposed changes are being considered by that Executive. In view of the importance of this question to every medical practitioner, and as the views expressed in this memorandum were re-affirmed by the Executive of the Manitoba Medical Association at a meeting on March 7th, it is reprinted in full. The members of the committee who drew up this memorandum for the Executive of the Manitoba Medical Association were Drs. W. Harvey Smith, F. D. McKenty, J. C. McMillan, E. S. Moorhead, W. W. Musgrove and J. D. Adamson. The memorandum was as follows:—

There is very good reason to believe that the integrity of the Canadian Medical Association has been threatened in recent years. The unanimity and cohesion that should form the backbone of a national organization seems to have become impaired. We believe that this tendency is to be deplored and feel that every effort should be made to consider it and to place the Canadian Medical Association in a strong position throughout the whole Dominion.

The reasons for this tendency to disintegration are, no doubt, complex, and possibly have an intimate relation to general economic conditions. These conditions we cannot hope to influence. We can, however, make a close scrutiny of our own organization with the hope of discovering its defects and applying appropriate corrections. After such a scrutiny, we feel that the chief defect is that the contacts of the various provincial societies, with the parent body, are not as intimate nor as direct as they should be.

The Executive Committee of the Canadian Medical Association has very wide powers. It can, according to the Constitution, assume all the functions of the Council. In spite of this, it has no direct contact with, or responsibility to, the various provincial bodies. Its members carry no mandate from their provinces and need not report to them. At various times, certain provinces have been entirely without representation on the Executive for several consecutive years. Such a condition must tend to produce a state of indifference or even antagonism to the activities of the Executive in the outlying provinces.

The Council, as it is planned in the Constitution, is a thoroughly representative body; in practice it is not representative. Its members, so far as the Western Provinces are concerned, are usually those who can afford the time and money to attend the annual meeting, and not necessarily those who are best qualified to represent the provinces. The Council meetings consequently usually contain a large number of disinterested and irresponsible onlookers.

We feel that the Canadian Medical Association should in effect be a federation of the various provincial associations, and in order to implement this plan we make the following suggestions:

1. **The Council**: The Council shall be much smaller and more representative. It might consist of two or three accredited representatives from each province. This body shall direct the general policies of the Association. It could meet several times a year. Each provincial group would be expected to report the proceedings directly to its own Executive. This Council should directly control, and be responsible for, the activities of the Executive. The expenses of the members of the Council could be met by the Canadian Medical Association and the various provincial associations. The meetings of Council could be held at various places as occasion demands. Sectional or regional meetings might also be arranged, e.g., all the Maritime members of Council, together with the Secretary. President and Chairman of Council, might meet for a special reason.

Such a plan would no doubt involve a greater expense than the present plan. This outlay would, we think, be justified as a definite contribution to the consolidation of the Association. It would not be necessary that every member of Council should attend each meeting. Whether or not they should go could be determined by the various provincial executives after considering the agenda.

2. **The Executive**: The Executive should consist of a small centralized body whose function is to carry out the plans of the Council. It might be composed of the Secretary, Treasurer and Chairman of Council, together with the President and President-Elect as ex-officio members.

3. **Annual General Business Meeting**: This should occupy one day before each annual meeting. This should be open to all members. Some subjects of general interest should be introduced and freely discussed.

4. **Field Secretaries**: In order to further unify, it might be well for the Canadian Medical Association to have a Field Secretary in each province. He might be a part time Secretary, who would look after the interests of the Canadian Medical Association in the province (membership, etc.), and should be selected by the local Executive.

5. **Branches or Divisions**: The various provincial organizations might be designated as divisions of the Canadian Medical Association, and the district societies might be called branches. All proceedings of the parent body could be passed to divisions and branches.

These suggestions are intended to be remedial rather than radical. We submit them with a sincere interest in the future of the Canadian Medical Association, and with the hope for its perpetuation and strength.

Minutes of Executive Meeting

MINUTES of a meeting of the Executive of the Manitoba Medical Association, held in the clubrooms of the Medical Arts Building on Thursday, March 7th, 1935, at 6.30 p.m.

Present.

Dr. G. W. Rogers	- - Chairman
Dr. J. S. McInnes	Dr. F. W. Jackson
Dr. J. C. McMillan	Dr. J. F. Wood
Dr. C. W. Wiebe	Dr. G. S. Fahrni
Dr. F. G. McGuinness	Dr. W. E. R. Coad
Dr. M. R. MacCharles	Dr. F. D. McKenty
Dr. Lennox Arthur	Dr. W. G. Campbell
Dr. W. Harvey Smith	Dr. C. W. MacCharles
Dr. R. R. Swan	Dr. E. S. Moorhead
Dr. G. D. Shortreed	Dr. W. H. Secord
Dr. F. A. Benner	

Following dinner, the President called the meeting to order, and it was moved by Dr. R. R. Swan, seconded by Dr. J. S. McInnes: That the minutes of the last regular meeting of the Executive, held December 20th, 1934, be taken as read. —Carried.

Report Re. Five Per Cent Deduction from Relief Accounts in Rural Areas.

The Secretary advised that a circular had been sent to all doctors in rural areas, and that, out of some 170 municipalities concerned, replies had been received from doctors with reference to 30 of them, giving authority to the municipality to deduct five per cent. from any accounts paid to them for services to indigent persons.

Alumni Journal.

Letter was read from the Editor of the Alumni JOURNAL, under date of January 10th, advising that the advertisement in question, appearing in their publication, had been an oversight, and that steps would be taken to see that similar advertisements did not appear again.

Minutes.

The Secretary then read minutes of a special meeting of the Executive, held February 1st, which were adopted.

Fort William Meeting.

Transportation.—The Secretary reported having interviewed Colonel Poussette of the Tourist and Convention Bureau, and read letter from him under date of March 4th, advising that the highway to Fort William could not be recommended for motoring at the time of the meeting, as it would not be completed until July 1st. Following discussion, it was decided that Dr. G. S. Fahrni and Dr. F. G. McGuinness be a committee to take up the matter of transportation with the railway company.

Programme.—Dr. McGuinness advised that the programme had been completed, and read list of papers to be given, which was accepted. Dr. Harvey Smith asked why there was to be no discussion on the papers, as he felt that this was one of the most inspiring parts of a meeting. Dr. McGuinness advised that the Ontario Medical Association were not having discussions following their papers.

Annual Meeting in September.

The Secretary read communication from Dr. Routley, under date of December 27th, asking if this Association intended to hold a meeting in September, and advising that the President, Dr. J. C. Meakins, and himself would like to attend. The Secretary advised that this letter had been turned over to Dr. P. H. Thorlakson, Chairman of the Post-Graduate Committee of the Faculty of Medicine, which is putting on a meeting September 10-11-12-13, and stated that he would get in touch with Dr. Thorlakson. Discussion followed regarding the programme, or if a business meeting only would be held, which could be worked in with the Faculty of Medicine programme.

It was moved by Dr. F. D. McKenty, seconded by Dr. W. Harvey Smith: That Drs. R. R. Swan, J. C. McMillan and J. S. McInnes be a committee to make definite arrangements. —Carried.

Letter from Representative on Executive Committee of C.M.A.

A letter was read from Dr. W. Harvey Smith, representative on the Executive Committee of the Canadian Medical Association, under date of March 5th, advising that the next meeting of the Executive would be held in Toronto on April 6th, and urging a closer linking up of the various provincial executives with the Canadian Medical Association, and referring to the memorandum dealing with this matter which had been submitted to the Executive of the Manitoba Medical Association last October.

Dr. Harvey Smith addressed the meeting and advised that the Manitoba Medical Association should be adequately represented every year on the C.M.A. Council and Executive Committee. He stated that there had been a vast improvement in the past year in the relationships with the C.M.A., and that the President and Secretary, representing this Executive, should attend the meetings of Council and have their expenses paid.

Dr. Fahrni stated that very careful consideration should be given to the selection of the delegates to Council; that the appointees should hold a meeting and go over the agenda beforehand in order to arrive at some definite understanding of the problems coming up for discussion, so that they could speak intelligently regarding them.

It was moved by Dr. W. Harvey Smith, seconded by Dr. F. D. McKenty: That this body reaffirm its views as expressed in the memorandum to the Canadian Medical Association of last October, and urge that the points dealt with in that memorandum receive the careful consideration of the Committee on Revision of the Constitution and By-Laws. —Carried.

Workmen's Compensation Board.

Dr. F. D. McKenty, Chairman of the Buffer Committee, reported that he desired the work of his committee to be split into two clauses, and after explanation submitted the following resolution:

> WHEREAS, in the regulations between the medical profession and the Workmen's Compensation Board, matters of prevention, conduct and discipline are properly the sphere of the College of Physicians and Surgeons of Manitoba, and questions regarding the scale of fees and financial returns in general are less appropriately their concern; THEREFORE BE IT RESOLVED THAT
>
> THE MANITOBA MEDICAL ASSOCIATION ASK THE COLLEGE OF PHYSICIANS AND SURGEONS OF MANITOBA TO ASSUME THE FULL INITIATIVE AND RESPONSIBILITY FOR DEALING WITH QUESTIONS OF PROFESSIONAL ETHICS, and that the Manitoba Medical Association continue, through their EXISTING REFEREE BOARD, TO DEAL WITH THE MATTERS OF ETIQUETTE, FEE SCHEDULES AND ANY OTHER QUESTIONS which come within its particular functions and powers, and that a copy of this resolution be sent to the College of Physicians and Surgeons of Manitoba and the Workmen's Compensation Board, with the request that, if approved they take the necessary steps to complete the arrangement.

It was moved by Dr. F. D. McKenty, seconded by Dr. W. G. Campbell: That this resolution be approved.

Discussion followed by Dr. McMillan, who stated it was his understanding that the Compensation Board had refused to pass information on to the College, also that the College were unable to act in disciplinary measures without there first being a court action.

Dr. McKenty, however, stated that he felt these objections had now been overcome.

The motion was then put before the meeting and carried.

Report of Representatives to Cancer Board.

(The Manitoba Medical Association representatives are Drs. G. S. Fahrni, M. R. MacCharles and D. G. Ross. Because of bad roads, Dr. Ross was unable to attend, but had communicated with Dr. Fahrni stating that he agreed with the attitude of the Treatment Committee of the Institute).

Dr. Fahrni then addressed the meeting and outlined the present standing of the Cancer Relief and Research Institute, both in respect to their finances and treatments being given. He stated that both the Executive and Treatment Committees now felt that some radical changes would have to be made in their organization if it were to be continued. He read a resolution passed at the annual meeting of the Union of Manitoba Municipalities in November, 1934, which is as follows:

> WHEREAS huge sums are expended yearly by the Province for the care of tubercular patients and the upkeep of sanatoriums for combating tuberculosis,
>
> AND WHEREAS no such facilities are available for those suffering from cancer, and radium treatment for cancer is expensive and beyond the ability of the average person to pay,
>
> AND WHEREAS cancer is now almost as prevalent a disease as tuberculosis, and yet little or nothing done by the Government for the care of patients suffering from this ever increasing terrible affliction,
>
> AND WHEREAS diagnostic cancer clinics should be immediately established by the Government at central points throughout the Province.
>
> THEREFORE, BE IT RESOLVED that the Union of Manitoba Municipalities strongly urge upon the Government for the early establishing of said clinics and a sanatorium for the care of those suffering from cancer, the project to be financed by this Province as per details to be worked out later.

Dr. Fahrni reported as follows: The Honorable Minister of Health wanted to know what stand the Cancer Relief and Research Institute would take on this resolution, and the question was carefully discussed at a meeting of the Treatment Committee and later by the whole Board of Trustees, and it was felt that some change should be made, looking forward to a more concentrated effort in the treatment of the disease than as at present practised. For instance, it was felt that, in as much as X-ray treatment and radium treatment are complimentary one to the other, it is reasonable to suppose that this type of therapy should be carried on under the same roof, and under some common authority. It was felt that surgery was being handled much better than the X-ray treatment, and for the present at least no disturbance in handling these cases seemed justified. The Committee felt that the resolution passed by the Union of Manitoba Municipalities involved too radical a change, and would entail expenditure of large sums of money.

Dr. Fahrni felt that it was his duty, as a representative of the Manitoba Medical Association, to come back and report the progress and receive advice and instructions, and, rather than have this matter passed through hurriedly, he thought that consultation with the different branches of the general profession would be advisable.

Dr. MacCharles then spoke on the subject, and further outlined the financial position of the Institute, advising how they had been going behind during the past four or five years. The X-ray equipment at present in the City was very much out of date from the standpoint of treatment, and, in view of a resolution such as this coming from the Union of Manitoba Municipalities, some definite action should be taken for the approval of the profession of the province. In view of these facts, he felt it was their duty, as representatives of this Association, to report the full details to the Executive. The Department of Health were vitally interested, in that they had guaranteed the loan to the Cancer Institute, but, from the standpoint of the patients, the ideal situation would be the commencement of a cancer hospital or clinic. The latest in X-ray machines for cancer treatment was one of 400,000 volts, costing approximately $20,000, and it was impractical to think of putting one of these in each hospital, whereas one would do all the treatment necessary.

Dr. McMillan stated that there were enough cases in the province to warrant the hospital, one machine would be sufficient, and that patients would get a far better chance of cure and better treatment.

Dr. Fahrni stated that the first consideration was treatment of the patient; the second, how is it going to affect the medical profession.

Dr. MacCharles presented some figures on cancer mortality as follows: In 1910 there were 34 deaths per 100,000. Three years ago there were 93 deaths per 100,000, or three times as many. In 1934 there were 800 deaths in the whole province. He stated that cancer hospitalization was very short, and that it was not more than one-twelfth of the hospitalization required in tuberculosis cases.

Dr. Jackson addressed the meeting and stated that the Minister had already asked for information in this connection. He (Dr. Jackson) had formulated a plan, which was his own idea of how a hospital or clearing house might be established.

Dr. Fahrni stated that he felt the matter should be placed before the whole profession at large.

Dr. McKenty stated that, in his opinion, it would be better to have it passed by the Advisory Council and then, with their approval, put it before a general meeting.

Dr. Jackson stated, that unless this was decided on, some outside organization would very shortly be offering to start the institute themselves.

Dr. Fahrni then advised that the Cancer Institute had written to the Minister of Health, under date of January 23rd, in answer to a request from him as to ways and means of meeting the demand from public bodies in regard to more efficient conduct of the cancer problems. This letter was read by the Secretary, which outlined the situation at the Cancer Institute.

Dr. C. W. MacCharles pointed out that the plan proposed by the Cancer Relief and Research Institute involved a radical change in the organization for the treatment of cancer. It meant, in effect, that the treatment of cancer would be taken over by the state. This might or might not be a good thing, but such a radical change should not be adopted without due consideration, and there was no apparent reason for haste. He suggested that the machinery, which had been established for securing the opinion of the medical profession on problems of such wide importance, should be used. He further suggested that the opinion expressed by the members of the Cancer Relief and Research Institute in their memorandum to the Minister of Health had not been referred to the general body of the profession before it was sent, and that the Institute did not necessarily represent the considered opinion of the medical profession as a whole.

It was moved by Dr. C. W. MacCharles, seconded by Dr. F. D. McKenty: That this question be referred to the Advisory Council, and then to the District Medical Societies, and the result brought before this Executive. —Carried.

Dr. Wiebe stated that, in the Tuberculosis Clinics, patients used to go for examinations without being referred by their local doctor. In this way some reflection was brought on the doctors when diagnosis was made, and he felt that, if cancer clinics were to be formed, they should deal exclusively through the local doctors.

Report of Committee on Sociology.

Dr. Moorhead addressed the meeting and stated that the Committee on Sociology was being criticized for pushing health insurance plans. He read the findings and recommendations in the back of the report of the Medical Service Committee, 1931, and stated that the committee had at no time brought forward a plan, but that it had followed these recommendations and studied the question of health insurance, informing the members of the medical profession through lectures and articles, and making it clear to the Government of the day that the doctors were prepared to discuss any plans which the Government might bring forward. He read the preface in the British Medical Association booklet on "Proposals for a General Medical Service for the Nation," showing that this was available to the public by purchase, and that the British Medical Association was not bringing it forward as a plan but was endeavoring to instruct the doctors and the public on the whole question.

Dr. Moorhead asked if the Association still approved of the work done by the Committee on Sociology. No formal motion was made, but it was evident that the committee was expected to carry on its present activities.

He then read certain resolutions presented by Dr. Routley at his recent visit, with regard to the Department of Pensions and National Health, which were considered at a meeting of the Committee on Sociology. He also read clauses from the minutes of a combined meeting of the Committee on Sociology, the Advisory Committee to the Minister of Health, and the Advisory Council.

It was moved by Dr. E. S. Moorhead, seconded by Dr. C. W. MacCharles: That the decisions of that meeting, for the acceptance of this Executive, be adopted. —Carried.

Dr. Jackson stated that the Minister of Health would attend the conference of Provincial Ministers of Health in a short time, and, on the suggestion of Dr. Routley at a meeting held in Winnipeg, the ideas of the medical profession should be placed before the Minister prior to the conference. Dr. Jackson suggested a delegation to wait on the Minister at an early date to present any suggestions to him.

It was moved by Dr. W. Harvey Smith, seconded by Dr. W. E. R. Coad: That Drs. E. S. Moorhead, F. D. McKenty and J. C. McMillan be a delegation to meet the Minister of Health and discuss the matter with him. —Carried.

Further, it was moved by Dr. F. A. Benner, seconded by Dr. J. S. McInnes: That Dr. W. Harvey Smith be added to this delegation. —Carried.

Dr. Moorhead read letter from the Registrar of the College of Physicians and Surgeons, under date of February 20th, with reference to our request for assistance in connection with the Woodworth plan. The letter stated that the College was unable to give financial assistance at the time being. Dr. Moorhead advised that the scheme intended to be tried out in this municipality had failed for the present.

Dr. Jackson stated that the scheme had not already failed, as there was a possibility that, at their meeting held the previous week, the municipal council may have struck a rate to take care of this project.

Toxoid Administration.

It was reported that a toxoid programme had been arranged in a certain municipality, and that the health officer of the district had quoted a price of $1.50 to do the work. Another doctor had been requested to submit a price, and had stated that, although not wishing to cut that already given, he would be willing to inoculate all the school age children at $1.50 each, but, in addition to this, would do all the pre-school age children free, which meant approximately three hundred additional inoculations. It was felt that representation should be made to the Provincial Board of Health, as they would have the power to pass a regulation specifying that, in the event of any further toxoid programmes, the public health officer in the municipality should be given this work, and if there were two doctors in the municipality, the work should be divided between them.

Dr. Wood stated that he felt a price of $1.00 was ample.

It was moved by Dr. J. S. McInnes, seconded by Dr. J. F. Wood: That the Health Officer should be instructed to do this work, and that a letter be written to the Provincial Board of Health requesting this. —Carried.

Representative to St. John's Ambulance Association.

Dr. McMillan stated that he had been previously appointed as representative to the St. John's Ambulance Association, but had been unable to attend the meetings.

It was moved by Dr. J. C. McMillan, seconded by Dr. F. A. Benner: That Dr. K. C. McGibbon be appointed as our representative to that Association. —Carried.

Membership.

Discussion regarding membership in the Association took place, and it was decided that a membership committee be appointed to review ways and means of increasing the number of members. This committee was appointed as follows:—Dr. C. W. MacCharles, Dr. F. W. Jackson and Dr. F. G. McGuinness.

TRAVELLING TUBERCULOSIS CLINICS

Brandon District, Brandon General Hospital
April 11-12-13.

Department of Health and Public Welfare

NEWS ITEMS

CANCER: As the campaign for the creation of the King George V Silver Jubilee Cancer Fund is now in operation the Department has thought it timely to try and present something of what is being done in other places and we take pleasure in quoting herewith a summary of the conditions in the State of Wisconsin as reported through their quarterly State Board of Health Bulletin:—

WISCONSIN ACCEPTS THE CHALLENGE OF CANCER

By G. W. HENIKA, M.D.
Assistant State Health Officer

Official statistics reveal that cancer is second among the leading death causes in Wisconsin. A disease that causes the deaths of 3,590 Wisconsin residents in one year, as cancer did in 1933, must be considered a public enemy meriting the greatest opposition that can be mustered in point of prevention and cure.

All measures that can be used successfully in reducing the number of deaths from cancer should receive the serious consideration of every resident in the state. Medical science has brought to light many facts about cancer during the past twenty years, but much remains to be learned before civilization can surmount this obstacle to a long and healthy life span.

Wisconsin Among the Leaders

Wisconsin has assumed a front-rank position among the states in the long campaign that will be necessary in the conquest of cancer. It is among the pioneer states in making cancer an officially reportable disease, the legislature of 1933 having enacted a provision to that effect. The reporting is standardized by means of a blank form providing for detailed data regarding each case that reaches the attention of any Wisconsin physician.

In bringing about legislation, the State Medical Society of Wisconsin and the State Board of Health were guided by the trials and errors of other states, with the result that the Wisconsin method of reporting cancer cases appears to be headed toward a successful collection of needed information concerning the ailment. The State Board of Health was made custodian of the cancer report cards, which are kept under lock and key and will always be strictly confidential, in accordance with the statute.

Menace of Cancer Quackery

One important reason for preserving the secrecy of these reports of existing cancer cases is the necessity of protecting the public from quacks, many of whom have the unmitigated viciousness to advertise that cancer is readily curable by their wonderful secret methods. These dangerous individuals do not hesitate to capitalize upon the desperate hope that cancer sufferers carry in their hearts, and if the names of Wisconsin cancer patients were available to the quacks the damage that the latter are capable of doing in point of sacrificing life, health and humble means would be vastly increased.

These records seem destined to provide, within a few years, a rich fund of information on cancer that will be of inestimable value to research workers in this field. Those already on file, which number well over 1,000 cases, reveal how careless and negligent individuals can be in securing an early diagnosis of cancer.

Early Treatment the Key

A study of 1,020 reports on cancer filed during the first eleven months in which the law was in force proves the need for greater public knowledge concerning cancer, particularly the vital importance of securing early diagnosis and early treatment. An early diagnosis usually insures prompt treatment, according to the data already submitted, and if the treatment employed is thorough and if all cancer tissue is removed the individual stands an excellent chance of recovery.

Early diagnosis can be made possible only by a visit to one's family physician as soon as any abnormal growth on the body is discovered or as soon as any symptoms are felt that lead the individual to suspect the presence of cancer.

Many times the presence of cancer is not suspected until the condition has become well established, giving the disease an unfair and highly dangerous advantage in its race against proper treatment.

Delay is Costly

Note in the following table how a large percentage of the 1,020 cases under study were rendered more hazardous through the sufferer's delay in reporting the first suspicions to the family physician,—

Attitude of Person Afflicted	No. of Patients
Cancer not suspected	102
Reported within 15 days	158
Reported in 15 to 30 days	66
Reported in 1 to 2 months	86
Reported in 2 to 4 months	90
Reported in 4 to 6 months	75
Reported in 6 to 12 months	96
Reported in 1 to 2 years	58

Note further that ten per cent of the cases studied, those represented in the above entry "Cancer not suspected", were not in a position to help themselves to prompt medical care for the simple reason that they had no suspicion of the presence of cancer in their bodies. Is not this a powerful argument in favor of a practice that has been advocated by health workers for years—that of a periodic physical examination by the family physician, who is trained to recognize such symptoms?

The Sensible Attitude

Every day given the initial cancerous growth before treatment is undertaken means additional difficulty in overcoming the growth once treatment is started.

Heedlessness and an instinctive fear to face the facts are probably the two chief reasons why those who suspect cancer in themselves hesitate to report for proper treatment. When prolonged, this hesitation can have but one result — increasing the odds against effecting a cure.

Thousands upon thousands of Wisconsin cancer deaths have resulted from this unreasoning delay. Prompt diagnosis and treatment, however, remove from cancer half the terror that it strikes in the human mind. What the average individual overlooks is the fact that the majority of cancer cases are curable when discovered and treated in their early stages.

Our Cancer Toll by Age Groups

Although the greater percentage of cancer deaths occur above 60 years of age in Wisconsin, the younger groups are by no means shunned by the ailment, and many of the elderly victims of each year's cancer mortality had been originally afflicted in their younger years.

The following table, based upon Wisconsin's 3,590 cancer deaths in 1933, shows how the victims were classified according to age, —

Age Groups	Cancer Deaths in 1933
Under 20 years of age	25
20 to 29 years	38
30 to 39 years	123
40 to 49 years	344
50 to 59 years	668
60 years and over	2,392

Assuredly delay in the discovery and removal of a cancerous growth spells disaster to the person involved. To combat this widespread tendency it will be necessary to preach as well as to practise the policy of early diagnosis and treatment. Avoid the cancer quack and the false advertisements of alleged cancer cures. They are responsible for incalculable loss of life among cancer sufferers who might have been cured.

Under no circumstances should a person be persuaded to attempt self-cure of actual or suspected cancer through use of the appalling variety of salves, drugs, fake appliances, or fraudulent remedies purporting to employ radium, for they are all alike in not only failing to cure the ailment but in causing the loss of valuable time in procuring genuine treatment.

How Cancer is Cured

Cancer frequently develops with dangerous speed. That is why early and radical treatment by a competent physician is essential in its cure. Every cancer cell must be removed or destroyed to effect a complete cure. Surgery, radium and the x-ray are the three recognized means of combating cancer, and among them they have accounted for practically all cured cases in the history of the disease.

Remember, then, these vital facts concerning cancer:—

Cancer is curable if treated promptly and skilfully.

Some forms of cancer can be detected only by a physician.

Protection from cancer rests upon proper periodic examination.

Any lump that you can see or feel should be brought to the attention of a physician.

The x-ray can usually detect the existence of internal cancers.

Every day of delay makes cure of cancer more difficult.

COMMUNICABLE DISEASES REPORTED

Urban and Rural : February, 1935

Occurring in the Municipalities of:—

Measles: Total 1049—The Pas 183, St. Clements 86, Winnipeg 70, Pilot Mound 69, Unorganized 45, Woodlands 44, Minnedosa 40, Brandon 37, Woodworth 32, Portage Rural 26, Louise 24, Rivers Town 22, Shoal Lake Village 17, Dauphin Town 15, Hamiota Rural 14, Whitewater 14, Montcalm 13, Virden 12, Hartney 11, Boissevain 10, Birtle Rural 8, Gilbert Plains Rural 8, Victoria 8, Hamiota Village 7, Whitehead 6, Cornwallis 5, Elton 5, Cameron 4, Daly 3, Kildonan East 3, Russell Town 3, Fort Garry 2, Norfolk North 2, Shellmouth 2, St. Boniface 2, Victoria Beach 2, Whitemouth 2, Blanshard 1, Emerson 1, Grey 1, Killarney 1, Portage City 1, Rhineland 1, Roblin Village 1, Rockwood 1, St. James 1, Thompson 1, Late Reported: St. Clements 131, Unorganized 50, Brokenhead 1, Portage City 1.

Whooping Cough: Total 129—Winnipeg 54, St. Laurent 33, St. Clements 23, Kildonan West 7, Brenda 4, Eriksdale 3, Brandon 2, La Broquerie 1, St. Vital 1, Unorganized 1.

Chickenpox: Total 120 — Winnipeg 94, Eriksdale 5, Thompson 5, Daly 2, Kildonan East 2, Roblin Rural 2, Hamiota Village 1, Kildonan West 1, Stonewall 1, St. Andrews 1, St. James 1, St. Vital 1, Unorg. 1.

Mumps: Total 115—Winnipeg 98, St. Vital 15, Fort Garry 2.

Scarlet Fever: Total 80—Winnipeg 41, St. Boniface 4, St. Vital 4, St. Andrews 3, Brandon 2, Kildonan East 2, Minto 2, Selkirk 2, Shellmouth 2, Stonewall 2, Unorganized 2, Birtle Town 1, Fort Garry 1, La Broquerie 1, Lorne 1, Morris Rural 1, Rhineland 1, Rockwood 1, Rosedale 1, Rosser 1, Souris 1, St. Clements 1, Ste. Rose 1, Transcona 1, Tuxedo 1.

Tuberculosis: Total 37—Winnipeg 10, Unorganized 5, Eriksdale 2, Hanover 2, Lakeview 2, Turtle Mountain 2, Archie 1, Bifrost 1, Birtle Town 1, Brokenhead 1, Grey 1, Kildonan West 1, Neepawa 1, Portage Rural 1, Selkirk 1, Shoal Lake Rural 1, Springfield 1, Stanley 1, Tache 1, The Pas 1.

Diphtheria: Total 29—Winnipeg 19, Ochre River 3, Hanover 2, Dauphin Rural 1, Rhineland 1, St. Boniface 1, St. Vital 1; Late Reported: Morris Rural 1.

Erysipelas: Total 5 — Winnipeg 2, St. Boniface 2, Cameron 1.

Influenza: Total 4—Winnipeg 1; Late Reported: Cartier 1, Glenwood 1, Unorganized 1.

German Measles: Total 4—Brenda 4.

Cerebrospinal Meningitis: Total 4—Winnipeg 2, St. Clements 1, Unorganized 1.

Puerperal Fever: Total 3—Eriksdale 1, Shoal Lake Rural 1; Thompson 1.

Typhoid Fever: Total 3—Brandon 2, St. Laurent 1.

Diphtheria Carriers: Total 2—Winnipeg 2.

Anterior Poliomyelitis: Total 1—Roland Rural 1.

Lethargic Encephalitis: Total 1—Late Reported: Hillsburg 1.

Trachoma: Total 1—Unorganized 1.

Venereal Disease: Total 116—Gonorrhoea 99, Syphilis 17.

DEATHS FROM ALL CAUSES IN MANITOBA

For the Month of December, 1934

URBAN—Cancer 33, Pneumonia (all forms) 19, Puerperal 5, Tuberculosis 5, Diphtheria 3, Erysipelas 2, Measles 2, Cerebrospinal Meningitis 1, Chickenpox 1, Syphilis 1, Typhoid Fever 1, Whooping Cough 1, all others under one year 10, all other causes 146, Stillbirths 14. Total 244.

RURAL—Cancer 18, Pneumonia (all forms) 18, Tuberculosis 11, Influenza 3, Puerperal 3, Diphtheria 2, Lethargic Encephalitis 1, Measles 1, Scarlet Fever 1, all others under one year 13, all other causes 187, Stillbirths 18. Total 276.

INDIANS—Tuberculosis 9, Pneumonia (all forms) 1, Puerperal 1, Cancer 1, all other causes 8, Stillbirths 3. Total 23.

DEATHS FROM ALL CAUSES IN MANITOBA

For the Month of January, 1935

URBAN—Cancer 45, Pneumonia (all forms) 17, Tuberculosis 7, Influenza 6, Syphilis 5, Diphtheria 2, Erysipelas 2, Chickenpox 1, Puerperal 1, Typhoid Fever 1, all others under one year 5, all other causes 184, Stillbirths 22. Total 298.

RURAL—Pneumonia 33, Cancer 21, Tuberculosis 12, Influenza 6, Diphtheria 3, Syphilis 2, Measles 1, all others under one year 4, all other causes 98, Stillbirths 14. Total 194.

INDIANS—Tuberculosis 8, Whooping Cough 6, Pneumonia 4, all others under one year 0, all other causes 7, Stillbirths 2. Total 27.

Medical Library University of Manitoba

A summary of the contents of some of the journals available for practitioners, submitted by the Faculty of Medicine of the University of Manitoba. Compiled by T. E. HOLLAND, B.Sc., M.D. (Man.), F.R.C.S. (Edin.).

"The Practitioner"—December, 1934.

"The Treatment of Hernia"—by Geoffrey Keynes, M.D., F.R.C.S., Assistant Surgeon, St. Bartholomew's Hospital.

"The Treatment of Hernia in Children" — by L. E. Barrington Ward, Ch.M., F.R.C.S., Surgeon, Hospital for Sick Children, Great Ormond Street.

"Hernia as a Surgical Emergency"—by Norman C. Lake, M.S., D.Sc., F.R.C.S., Senior Surgeon, Charing Cross Hospital.

"Post Operative Chest Complications and Their Treatment"—by C. J. Fuller, D.M., M.R.C.P.

"Non-Specific Colitis"—by D. C. Hare, C.B.E., M.D., M.R.C.P., Physician, Royal Free Hospital.

—The etiology and clinical symptoms are described. Treatment by high vitamin diet is advised on account of frequent association of colitis with vitamin deficiency and anaemia.

"Cancer of the Nasal Accessory Sinuses: with Reports of 13 Cases"—by E. Watson-Williams, M.C., Ch.M., F.R.C.S., Bristol Royal Infirmary.

—An analysis of signs, symptoms, treatment and results in 13 cases. Three cases are described in detail.

"A Short Study of Psycho-Analysis"—by C. W. J. Brasher, M.D., Medical Superintendent, Woodlands Park.

"The Practitioner"—March, 1935.

This number contains a symposium on "The Anæmias."

"The Diagnosis of the Anæmias"—by A. E. Gow, M.D., F.R.C.P., Physician, St. Bartholomew's Hospital.

"The Value and Interpretation of Blood Counts, with Notes on Technique"—by Lionel E. H. Whitby, C.V.O., M.D., F.R.C.P., Assistant Pathologist, The Middlesex Hospital.

"The Treatment of Pernicious Anæmia" — by John F. Wilkinson, M.D., M.R.C.P., M.Sc., Ph.D., University of Manchester.

"A Note on Agranulocytic Angina"—by John F. Wilkinson, M.D., M.R.C.P.

"Anæmia in Pregnancy"—by Daniel T. Davies, M.D., F.R.C.P., Assistant Physician, Royal Free Hospital.

"The Anæmias of Infancy and Childhood"—by Leonard G. Parsons, M.D., F.R.C.P., Professor of Diseases of Children, Birmingham, and W. Carey Smallwood, M.B., M.R.C.P.

"Anæmia Associated with Splenomegaly in Childhood"—by Richard W. B. Ellis, M.A., M.D., M.R.C.P., Pathologist, Great Ormond Street Hospital for Sick Children.

"Indications and Technique for Blood Transfusion"—by F. A. Knott, M.D., M.R.C.P.

"The Differential Diagnosis of Grave's Disease"—by Charles S. D. Don, M.D., M.R.C.P., Hon. Physician, Salford Royal Hospital, Manchester.

"The Canadian Medical Association Journal"—March, 1935.

"Cancer"—by A. Primrose, C.B., M.B., F.R.C.S., Toronto.

"Cancer—the Pathological Aspect"—by William J. Deadman, Hamilton.

"The Place of Surgery in the Treatment of Carcinoma of the Alimentary Tract"—by Donald C. Balfour, Rochester, Minnesota.

"The Role of Radio Therapy in the Problem of Malignancy"—by E. E. Shepley, M.B., Radiotherapist for the Saskatchewan Cancer Commission.

The above four articles were given in a Symposium on Cancer at the Annual Meeting of the Canadian Medical Association, Calgary, 1934.

"Fracture, Dislocations and Fracture-Dislocations of the Spine"—by Kenneth G. McKenzie, Toronto.

—The subject is well discussed and good illustrations are included.

"Nickel Dermatitis"—by Frank E. Cormia, M.D., Montreal, and Sloan G. Stewart, M.D., Atlantic City, N.J.

—Eleven case reports are given, illustrating the dermatitis produced in persons with a generalized hypersensitivity to nickel.

"Strychnine Poisoning in Children"—by John R. Ross, M.D., and Alan Brown, M.D., F.R.C.P. (C.), Toronto.

"The Diagnosis and Management of Acute Cholecystitis"—by Roscoe R. Graham, M.B., Toronto.

"Edinburgh Medical Journal"—March, 1935.

This number contains several articles on Tuberculosis in its various forms.

"Three Cases of Tuberculosis of the Central Nervous System followed by Apparent Clinical Recovery"—by Agnes R. MacGregor, Lecturer on the Pathology of Diseases of Children, University of Edinburgh.

"Acute Pneumonic Phthysis" — by William A. Horne, M.D., Glasgow.

—Report on three cases in which treatment by artificial pneumothorax was attempted.

"Musings in the Garden." "Fifty Years Association with the Tubercle Bacillus"—by Sir Robert Philip, M.A., M.D., F.R.C.P.

—An address to the Tuberculosis Society of Scotland in which Sir Robert Philip gives the results of a life long study of the disease beginning with the discovery of the Tubercle Bacillus.

"Meningeal Tuberculosis"—by William Brown, O.B.E., M.B., F.R.C.P.E., Lecturer in Diseases of Children, Aberdeen.

"Meningeal Tuberculosis, Bacteriology and Pathology"—by Agnes R. MacGregor, M.B., F.R.C.P.E., Royal Hospital for Sick Children, Edinburgh.

"Cerebro-Spinal Fluid in Tuberculous Meningitis"—by J. Gordon Clark, M.D., Clinical Assistant, Dundee Royal Infirmary.

"Meningeal Tuberculosis as a Terminal Feature in Pulmonary Tuberculosis"—by C. Cameron, M.D., F.R.F.P.S.

"Renal Tuberculosis" — by David Band, M.B., F.R.C.S. (Edin.).